

School Health Services in Missouri



Presentation Goals

- Review the School Health Online Reporting System (SHORS) report for 2017/2018
- Increase awareness of resources to assist LPHA staff working with or in schools

Introduction

- Students spend many hours every week in school
- Some students with chronic health conditions may have lower academic achievement than those without chronic conditions
- Managing chronic health conditions can be challenging for school systems, educators, and clinicians

National Data

Estimated Prevalence of Chronic Health Conditions Among U.S. Children aged 0-18 years*

Chronic health condition	Estimated percentage of U.S. students affected*
Asthma	7.3-9.5% of all children 18% of children living in poverty
Seizure disorders	0.7%
Diabetes	0.3% (includes type 1 and type 2)
Poor oral health	15.6% (untreated dental caries)
Food allergies	4.0%

**Estimates reflect populations from various studies—specific age groups may vary*

School Health Online Reporting System (SHORS)

Students with Disease and Conditions in Public Schools, Missouri, 2017-2018

437 out of 518 public school districts reported data to MDHSS. The enrollment in these districts was 830,867, representing 93% of all students enrolled in public schools (893,526) in the 2017-2018 school year.

Disease/Conditions	Number	Disease/Conditions	Number
Allergies - life threatening - Food	21,072	Hemophilia/bleeding disorder	1,894
Allergies - life threatening - Insect	4,441	Hydrocephalus with shunt	633
Allergies - life threatening - Latex	1,140	Kidney disease	1,297
Asthma - on medication at home or school	83,103	Mental Health	
Blind/Visually Impaired	12,415	• ADD/ADHD	66,892
Cancer - History, not on medication	761	• Anxiety	14,018
Taking Chemotherapeutic Medication	157	• Asperger's Syndrome	2,318
Chronic infection (e.g., Hepatitis, etc.)	141	• Autism	10,396
Cleft lip and palate	634	• Bipolar	2,865
Cystic Fibrosis	235	• Depression	8,267
Daily special health care procedures		• Obsessive Compulsive Disorder	1,919
• Blood sugar check	2,377	• Oppositional Defiant Disorder	3,922
• Catheterization care	247	• Post-Traumatic Stress Syndrome	2,093
• Ostomy care	92	• Tourette's syndrome	1,065
• Tube feeding	513	Migraine headaches	14,019
• Ventilator dependent	23	Neuromuscular disorder, non-progressive (e.g., Cerebral Palsy, etc.)	1,997
Deaf/Hearing Impaired with no assistive devices	2,573	Neuromuscular disorder, progressive (e.g., Muscular Dystrophy, etc.)	410
Deaf with FM systems	603	Organ Recipient	154
Deaf with hearing aids	1,725	Orthopedic disability (permanent)	2,177
Deaf with cochlear implants	419	Orthopedic disability (temporary, e.g., Osgood Schlatter, fractures, etc.)	4,210
Diabetes		Scoliosis requiring treatment	1,257
• Type 1	2,234	Pregnancy	455
• Type 2	627	Teen Parenting	604
Drug/alcohol abuse	1,086	Rheumatoid Arthritis	563
Eating disorder (e.g., Anorexia, Bulimia, etc.)	389	Autoimmune disease (e.g., Lupus, etc.)	1,053
Gastrointestinal Disorders (e.g. Irritable Bowel Syndrome, etc.)	5,973	Routine medications at school	19,110
• Crohn's Disease	402	Seizure disorder	7,792
• Ulcers	259	Sickle Cell Disease	676
Blowel/Bladder Incontinence	3,279	Students with "do not attempt resuscitate" (DNAR) order	12
Chromosomal Abnormalities (e.g., Down Syndrome)		Traumatic Brain Injury	

- Collected since 1993
- Public schools in MO

A Workforce of Over 2,100 School Health Staff

SCHOOL NURSES IN MISSOURI

Working together to keep students healthy

451 Lead School Nurses



- ▶ Assure adherence to health policies
- ▶ Coordinate in-service training for school nurses
- ▶ Establish and maintain data collection

1,889 School Nurses



- ▶ Plan and implement health services
- ▶ Evaluate the effectiveness of health services
- ▶ Collaborate with other staff to promote wellness

278 Health Aids



- ▶ Carry out health services delegated by nurses
- ▶ Provide care following established procedures
- ▶ Make student referrals to nurses

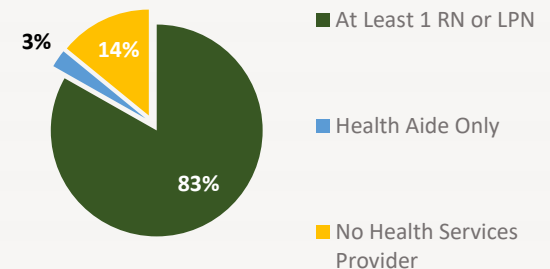
State School Nurse Consultant



- ▶ Provides guidance on school health services to school districts
- ▶ Provides educational opportunities for school nurses
- ▶ Develops and updates guidelines for school health services
- ▶ Oversees data collection of school health services

- 518 school districts
- 90% of students enrolled in 50 districts with access to school health staff
- 27 with health aides only
- 18 with no services
- 45 LPNs working without supervision

Distribution of School Health Staff in Missouri Public Schools (2016)



*included in school nurse total

Student Encounters: Missouri School Health Program

Compiled from voluntary reporting. Reflects 549,917 of 893,526 Missouri students (62%); 272 of 518 public school districts

2017-2018
School Year

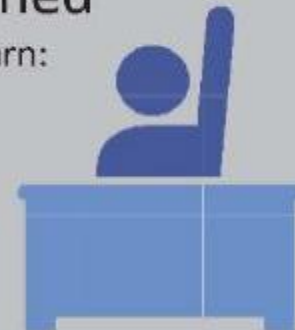
Total sum of **visits** to the health office:

5,334,224



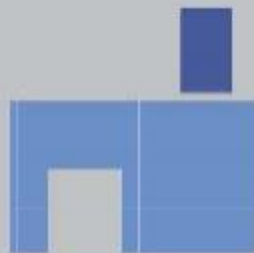
Number of health office visits resulting in the student being **returned** to the **classroom** to learn:

5,082,822



Number of health office visits resulting in the student being **sent home** due to illness, injury or other:

250,025



Number of health office visits resulting in **emergency** medical services or 911:

1,377



Chronic Health Conditions: Missouri Students

2017-2018
School Year



Total Student
Population
:
893,526

Chronic Health Conditions
Diagnosed by a
Health Care Provider:

120,409*

Asthma

83,103



Life Threatening
Allergies

26,653



Seizure Disorder

7,792



Type 1 Diabetes

2,234



Type 2 Diabetes

627



*of those reported

Missouri Revised Statutes

Chapter 35, Section 335.016

Missouri Revised Statutes

Chapter 335 **Nurses** **Section 335.016**

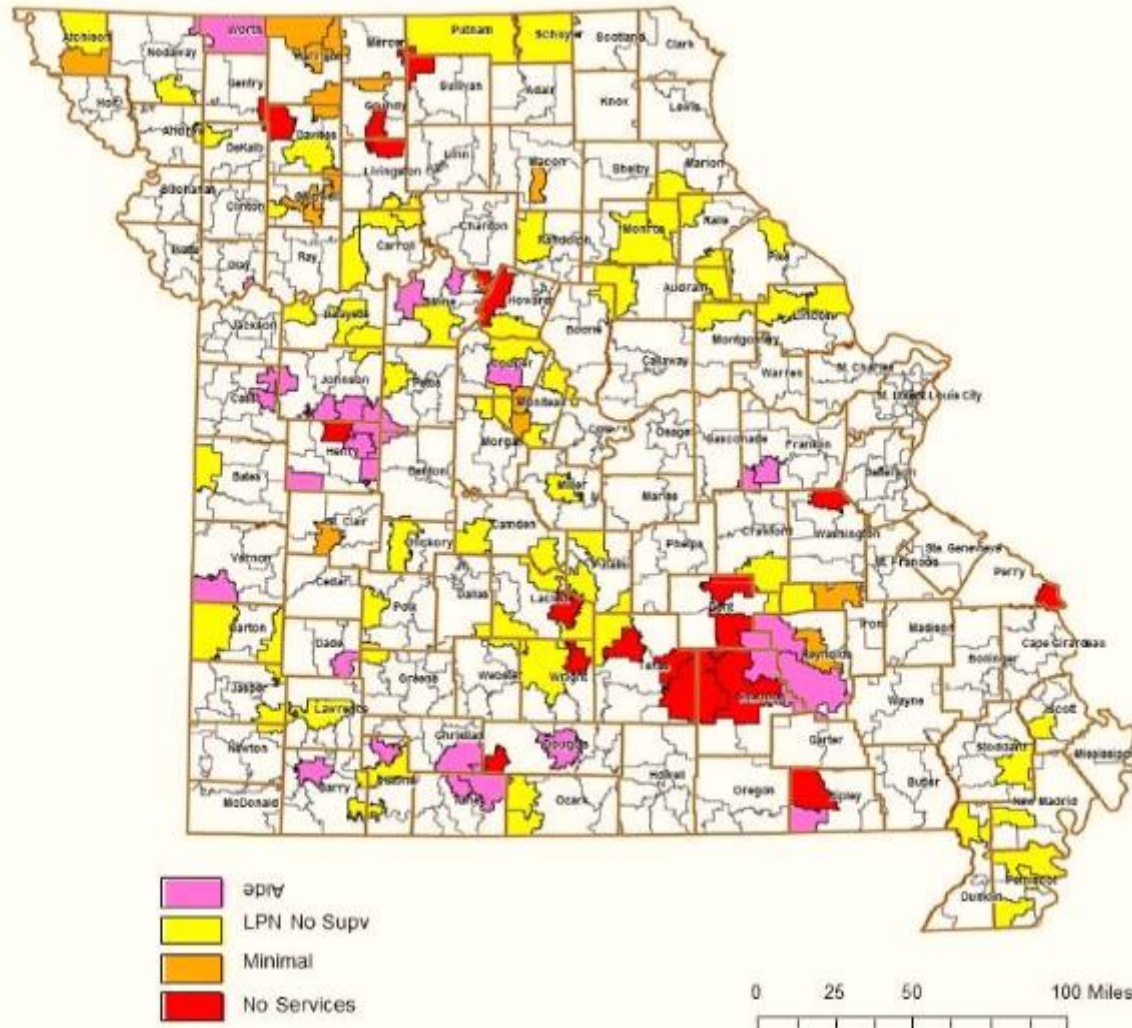
August 28, 2012

Definitions.

335.016. As used in this chapter, unless the context clearly requires otherwise, the following words and terms mean:

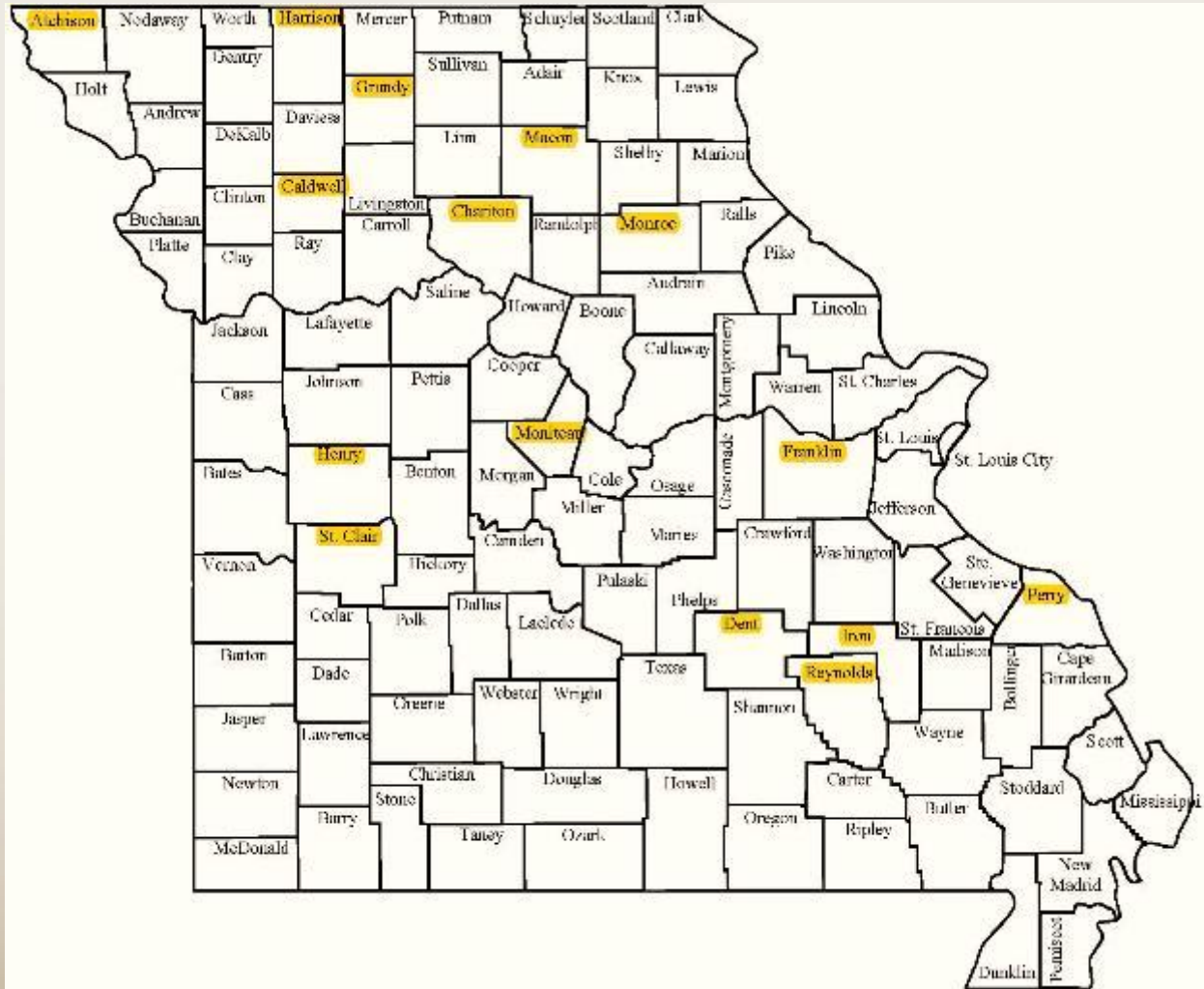
- (1) "Accredited", the official authorization or status granted by an agency for a program through a voluntary process;
- (2) "Advanced practice registered nurse", a nurse who has education beyond the basic nursing education and is certified by a nationally recognized professional organization as a certified nurse practitioner, certified nurse midwife, certified registered nurse anesthetist, or a certified clinical nurse specialist. The board shall determine the minimum

Gaps in Missouri School Health Services 2017-2018 School Year



A Shout Out!

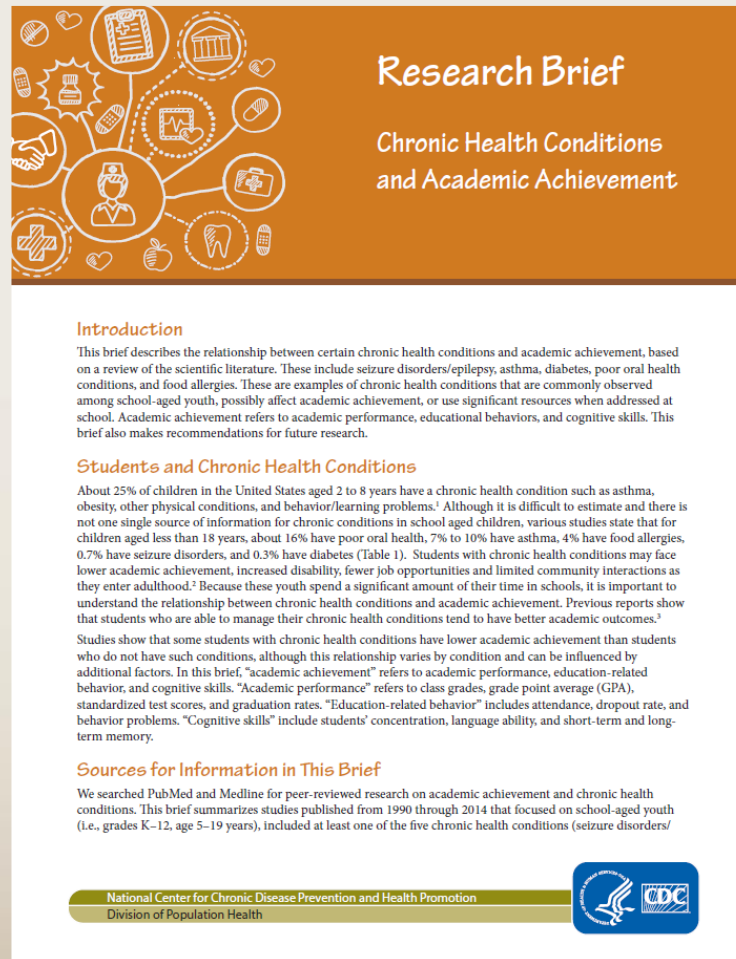
LPHAs Working with School Districts



Managing Chronic Health Conditions in Schools



Chronic Health Conditions and Academic Achievement




Chronic Health Conditions and Academic Achievement: Poor Oral Health

- Poor oral health conditions are associated with more school absences and a reduction in overall ability to learn
- Does not **cause** poor academic achievement



Strategies to Address Needs of Students with Chronic Conditions



Research Brief

Addressing the Needs of Students with Chronic Health Conditions: Strategies for Schools

US Students and Chronic Health Conditions

Children and adolescents with chronic health conditions spend many hours in school and depend on trained school staff and a healthy school environment to help them manage these conditions. A good working partnership between students, school nurses, clinicians, school staff, and administrators, can help reduce absenteeism and improve academic achievement.

About 25% of children aged 2 through 8 years have a chronic health condition, including asthma, obesity, other physical conditions, and behavior or learning problems.¹ Although it is difficult to estimate and there is not one single source of information for chronic conditions in school aged children, various studies state that for children and teens younger than 18, about 16% have poor oral health conditions,² 7% to 10% have asthma,³⁻⁶ 4% have food allergies,⁷ 0.7% have seizure disorders,^{8,9} and 0.3% have diabetes.^{4,10}

Studies show that for some students, chronic health conditions are associated with lower academic achievement, but this finding varies by condition and can be influenced by other factors. Schools are responsible for helping students manage chronic health conditions for two reasons. First, students may rely on the school for clinical services, such as those provided by a school nurse or at a school-based health center, because of barriers to health care access. Second, federal and state regulations require schools to provide services and accommodations for students with chronic health conditions.

This brief describes strategies for school-based management of students' chronic health conditions, for example, seizure disorders/epilepsy, asthma, diabetes, poor oral health, and food allergies.


Sources for Information in This Brief

This brief summarizes current scientific knowledge from a systematic literature review on the relationship between the role of school health services in the health and academic outcomes of students with chronic health conditions.¹¹ It also reflects position statements and guidelines from national organizations with expertise in school health, and the [Whole School, Whole Community, Whole Child](#) (WSCC) approach for comprehensive school health.¹² School districts and schools can use the following strategies and activities to address the needs of students with chronic health conditions.


Strategy 1. Plan and develop a coordinated system to meet the needs of students with chronic health conditions.

A coordinated system based on the WSCC framework is one that reinforces the connection between health and learning. It can help facilitate collaboration across several disciplines—for example, nursing, mental health or

National Center for Chronic Disease Prevention and Health Promotion
Division of Population Health



The Role of the School Nurse



Managing Chronic Health Conditions in Schools: The Role of the School Nurse

Approximately 25% of children ages 2-8 years old in the United States are affected by chronic health conditions.¹ These can include asthma, diabetes, seizure disorders, food allergies, and poor oral health. Managing chronic health conditions in schools can be complex. This fact sheet focuses on the role of the school nurse in helping students manage their condition to help reach their full academic potential.

Health services in schools are a key component of the [Whole School, Whole Community, Whole Child Model](#).² The healthcare needs of students with a chronic health condition may be complex and continuous. The school nurse is often the only healthcare provider in a school for both emergencies and daily management of chronic health conditions. The National Association of School Nurses (NASN) and the American Academy of Pediatrics (AAP) recommend that school districts provide a full-time school nurse in every school building. A full-time school nurse and dependable funding are essential to achieve high quality health services and to meet student health needs.

School nurses often have three main roles in managing chronic health conditions

1 Providing direct care, such as giving children medications.

- Many students with a chronic health condition are able to attend school and succeed due to services offered by school nurses.
- School nurses may be the first to identify chronic health conditions in students when they enter school.

2 Providing case management.

- The school nurse is a key member of the educational team and is usually responsible for assessing, planning, implementing, and monitoring individual health plans (IHP) and emergency care plans for students with chronic health conditions.



DID YOU KNOW

- A recent study estimated that for every dollar invested in a school nursing program, society gains \$2.20.⁴
- School nurses often lead the development and evaluation of school health policies and provide healthcare services for students who qualify under Section 504 of the Rehabilitation Act of 1973 to meet requirements of federal laws.
- School nurses assist students in learning to manage their chronic health conditions, increasing time in the classroom and decreasing absenteeism. This saves costs to the school district and increases students' academic success.
- Smaller nurse-to-student ratios are associated with lower absenteeism rates and higher graduation rates.⁵

National Center for Chronic Disease Prevention and Health Promotion
Division of Population Health



- Provide direct care, such as giving children medications
- Provide case management
- Advocate for students and their families to help them get the resources and support they need
- Help improve academic achievement and decrease absenteeism
- For every dollar invested in a school nursing program, society gains \$2.20

Health Insurance for Children



Millions of children and teens are not insured who could qualify for health insurance.¹ Research shows that students who had Children's Medicaid (CHIP) coverage were more likely to complete high school and graduate from college.² Schools can help boost attendance and academic performance with one action: help students and their families get health insurance.²

Schools can help students enroll in health insurance in three ways

STEP 1 Identify students without insurance and those who may have a chronic health condition

At the beginning of the school year or upon enrollment during the school year, identify whether a student has health insurance and if they have a chronic health condition. Update existing school health records or enrollment forms to note this information.

Updating records or forms may help schools increase enrollment of eligible students and family members in Medicaid, CHIP, private or other eligible insurance plans.³

- This can be as easy as adding questions about health insurance and chronic health conditions to the [Federal School Lunch program enrollment form](#).
- If a student does not have health insurance, request parental permission to talk with them about obtaining coverage and enrollment assistance, if appropriate.

Recording student health information is a recommended practice for school nurses and state law might require it.⁴



DID YOU KNOW

Chronic health conditions may include:

- asthma
- diabetes
- epilepsy or seizure disorder
- food allergies
- hypertension/high blood pressure
- poor oral health

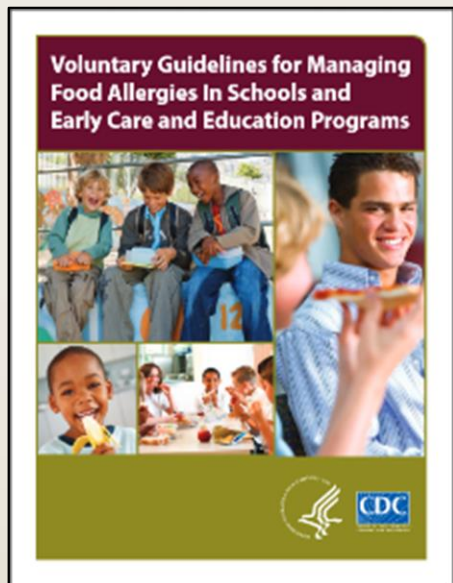
- Identify students without insurance
- Help students and families obtain coverage
- Refer families to school-based or community-based medical care providers and other resources
- Identify and assist at-risk or vulnerable students and their families



Additional Resources



CDC Food Allergy Toolkit for Schools



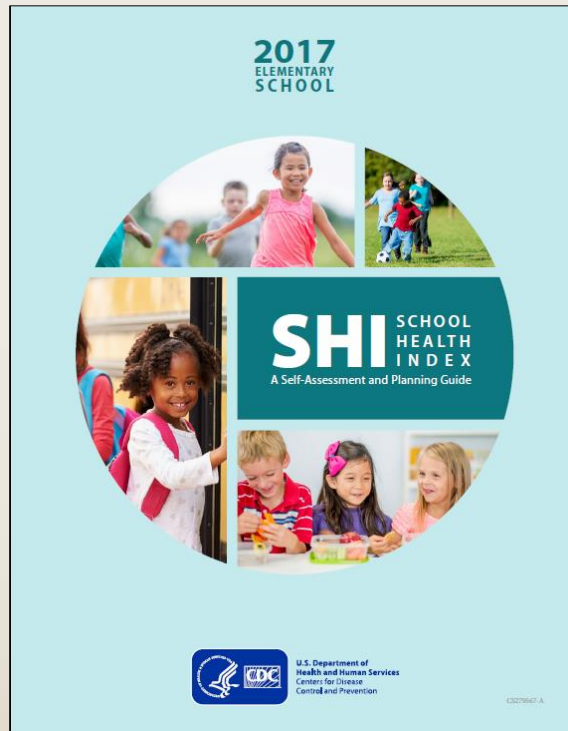
- 6 audience-specific tip sheets
- 6 audience-specific customizable PowerPoint presentations
- 7 audience-specific podcasts
- Select resources list for schools



Strategies for Addressing Asthma in Schools



School-Level Assessment Tool: CDC School Health Index



www.cdc.gov/HealthySchools/SHI

Family Engagement

Healthy Students Do Better in School

STUDENTS THAT ARE

- Physically active
- Eating breakfast and healthy foods
- Managing their chronic health conditions like asthma or diabetes

Have increased test scores.

Have better grades.

Have increased school attendance.

Have improved classroom behavior.

Parents for Healthy Schools

A Guide for Getting Parents Involved from K-12

November 2015

PARENT ENGAGEMENT

Strategies for Involving Parents in School Health

Children and Adolescents

How Can You Help?

Asthma is a disease that affects airways in the lungs and is one of the most common long-term diseases. Asthma may cause wheezing, shortness of breath, coughing, or trouble getting air in or out of the lungs. Asthma symptoms can happen when a person is exposed to asthma triggers, such as pollen, smoke, dust, mold, cold viruses, stress, exercise, and weather. Cold and flu can also cause asthma symptoms to worsen. Asthma symptoms can be controlled by avoiding triggers and using medications prescribed by a health care provider. Asthma that is not well controlled may lead to emergency room visits and possibly being admitted to the hospital. It is the leading cause of days missed at school. Children can help manage asthma by working with their doctor and school personnel to help manage asthma care at school. Healthy students are more likely to have better attendance, grades, and test scores.

Knowing the answers to the following questions can help you support your child's school in asthma asthma. If you don't know the answers to these questions, check with the school handbook or school website, attend a school website meeting or parent teacher association of the meeting, or simply ask your child's teacher.

- Is there a full-time registered nurse in the school building at all times, or a school-based health center to help children with chronic medical conditions or emergencies?
- How does the school identify and share information about students with asthma?
- Does the school require that each student with asthma have a current asthma action plan on file?
- Does the school allow students to carry their own inhalers, such as albuterol, at school?
- What are the school protocols for students who have asthma symptoms at school, on the school bus, or in the car, or in the case of emergency or hospitalization?
- Are other school staff, such as teachers, bus drivers, and food service staff, trained to recognize and respond to a student that may be having asthma symptoms?
- What is the policy for student participation in physical activity (e.g., recess or classroom activity breaks) or physical education at school if the child has asthma?
- Is there a bullying prevention policy in the school or district that discourages teasing or encourages awareness of and rights of students with medical conditions?
- Does the school or district have an asthma or allergy management program to improve the school environment and reduce exposure to asthma triggers?

Physical Education

How Can You Help?

Physical education should be an enjoyable experience for all students. Students should be active for most of the time at school, during their physical education classes. Teachers, with appropriate knowledge, skills, behaviors, and confidence to be physically active for a lifetime. In addition, physical education can help improve students' academic achievement such as grades and test scores.

Knowing the answers to the following questions can help you support physical education in your child's school. If you don't know the answers to these questions, check with the school handbook or school website, attend a school website meeting or parent teacher association of the meeting, or simply ask your child's teacher.

Are students active most of the time during physical education classes?

Are there opportunities for parents to help with physical education classes?

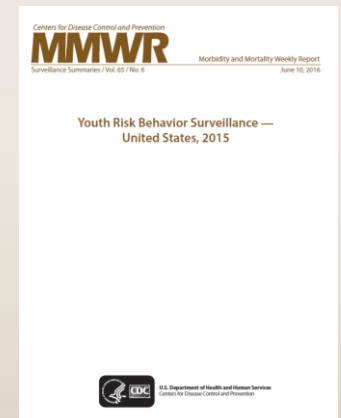
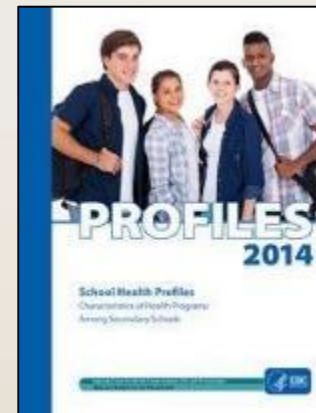
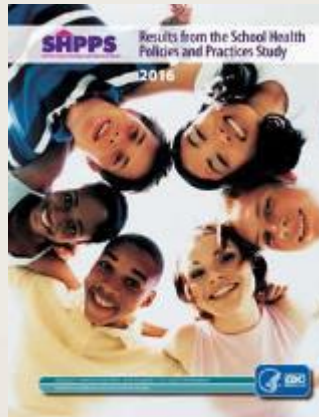
Does the school participate in the **Let's Move!** national physical activity program, which helps promote physical activity, healthy eating, and responsible media use and screen time?

Does the school participate in **Let's Move!** national physical activity program, which helps promote physical activity, healthy eating, and responsible media use and screen time?

What's Happening at School?

CDC Division of Adolescent and School Health (DASH) School-Based Surveillance

- School Health Policies and Practices Study
- School Health Profiles
- Youth Risk Behavior Surveillance System



<http://www.cdc.gov/healthyyouth/data/index.htm>

CDC's Virtual Healthy School

An online interactive school building that helps visualize how the 10 components of the WSCC model are integrated into the classroom, staff break room, hallways, cafeteria, gymnasium, recreational field, community, and home.



CDC Healthy Schools Website: www.cdc.gov/healthyschools



Conclusion

- Studies show that school health services can help school-aged youth and their families with chronic health conditions
- Students whose symptoms are controlled are more likely to have higher school achievement
- School nurses and school-based services can help schools increase students' overall health and academic success
- Teacher and staff training should include accurate expectations about the academic potential of children with chronic health conditions—try not to underestimate

Thank you!



Marjorie Cole, MSN, RN - Marjorie.Cole@health.mo.gov

Barbara Spaw, BSN, RN - Barbara.Spaw@health.mo.gov